

Dt: 26/11/25

Day - 05

## conditional statements:

conditional statements allow your Program to make decisions based on conditions.

They help you execute different blocks of code depending on whether a condition is 'true' or 'false'.

Types of conditional statement:-

1. if

2. if else

3. if ~~else~~ else.

4. nested if else

### 1. If statement:-

use to run a block of code only if a condition is 'True'.

Syntax:-

```
if condition:
    # code to execute.
```

example:-

```
age = 20
```

```
if age > 18:
```

```
    print("you are an adult")
```

### 2. If else statement

Runs one block if the condition is true, otherwise another block.

Syntax:-

```
if condition:
    statement
else:
    statement
```

Example:-

```
num = 5
```

```
if num > 0:
```

```
    print("positive number")
```

```
else:
```

```
    print("negative number")
```

### 3. If elif else statement

used when you have multiple conditions.

Syntax:-

```
if condition 1:
```

```
    # code 1
```



elif condition 2:

# code 2

else:

# code 3

example:-

marks = 85

if marks >= 90:

print("Grade A")

elif marks >= 75:

print("Grade B")

elif marks >= 50:

print("Grade C")

else:

print("fail")

4. Nested if statements

if inside another if.

Syntax:-

if condition 1:

# code block for condition 1

if condition 2:

# code block for condition 2

if condition 3:

# code block for condition 3

else:

# code block if condition 2 is true

else:

# code block if condition 1 is false.

example:-

age = 20

country = "India"

if age >= 18:

if country == "India":

print("eligible to vote in India")

else:

print("eligible but not in India")

else:

print("not eligible to vote").